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## SYSTEM AND METHOD FOR PROVIDING A MEDICAL LEAD BODY

## ABSTRACT OF THE DISCLOSURE

An implantable lead and lead body, method of manufacturing the same, and a system and method for stimulating a portion of a body is disclosed. In one advantageous embodiment, a lead body assembly is formed by placing an inner layer of extrusion material on a mandrel, wrapping a plurality of conductors coated with extrusion material around the inner layer, and placing an outer layer of extrusion material over the plurality of conductors. Heat shrink tubing is placed over the lead body assembly and the lead body assembly is heated to melt the extrusion material. The melted extrusion material is compressed around the plurality of conductors. The assembly is then cooled and the heat shrink tubing is removed. The solidified extrusion material forms a protective wall that encapsulates the plurality of conductors in the lead body.